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PUBLIC INSTRUCTION IN PERU

BY ALBERT A. GIESECKE, PH.D.,
Rector of the University of Cuzco, Cuzco, Peru.

There can be little doubt that the greatest problem confronting Peru to-day is the organization and extension of public instruction.¹ The country is in a fair way towards settling its boundary controversies, with the possible exception of the Tacna and Arica question pending with Chile. Hence the boundaries need no longer be the central theme of discussion and agitation by the large majority of Peruvian citizens.

As a background for the discussion of the educational problem in Peru, it seems expedient to state briefly some of the obstacles which impede rapid progress to the best interests of education. In the first place, the physiography of the country merits consideration. With an area approximately one and a half million square kilometers, and a country practically divided into three, more or less, independent sections, Peru is severely handicapped in carrying on the functions of government. The coastal region extends along the western part of the Republic, in a strip averaging less than a hundred miles in width. It is generally devoid of rainfall the year round. It occupies about ten per cent of the area of the republic. The "Sierra" or mountainous region lies to the eastward, and is the seat of the plateaus and high peaks of the Andes. Roughly speaking, it occupies about twenty-five per cent of the area of the republic. The mountains are largely responsible for the climatic conditions of the country. Still farther to the east is an immense tract of land, exceedingly rich in flora and fauna. It occupies almost two-thirds of the area of the country, and, with the exception of two or three small districts, is practically unknown. Located in the upper regions of the Amazon basin, it is a land of present surprises and of great promise for the future. At present it is sparsely settled, and, indeed, inhabited in part by an uncivilized race.

¹I hereby desire to acknowledge the courtesy of several persons who have so kindly supplied me with the necessary data, all of which is of an official character. I refer to Dr. Matias Leon, Ex-Minister of Instruction; Dr. H. E. Bard, Adviser to the Minister of Instruction; Dr. Justus Perez Figuerola, Director-General of Instruction; Mr. Aurelio Gamarra y Hernandez, Chief of the Bureau of Secondary and Higher Education, and Dr. Vincente Delgado, Chief Statistician of the Department of Instruction.

The second obstacle to the rapid development of a rational educational system may be considered under the social organization of the country. As in the United States, there is a great mixture of races. The main distinction in a comparison between the two countries, however, lies in the fact that in the former country the white element predominates, numerically considered, whereas in the latter, the Indian, or Cholo, element, *i. e.*, the descendants of the Incas, comes first. Most of the white, and mestizo, or mixed white and red blood, is found along the coast. It is the center of influence of the Spaniard. The other two regions are settled chiefly by the mestizo element. The negro element is also present, and is concentrated chiefly in the coastal region. Allowing for exceptions, there is naturally a difference in the intellectual capacities of these race mixtures. This difference comes out more clearly in an investigation of the location and work of secondary and higher institutions of learning, which are concentrated chiefly in the coastal region. Yet this region has only about twenty-five per cent of the three and a half million inhabitants of the country. More might be added with reference to the influence of climate, racial assimilation and the effects of Spanish colonization upon the social organization, but none of these presents insurmountable obstacles to the advancement of public instruction.

Political drawbacks also exist, and they are most in evidence in affecting the administration of the public schools of the country.

Peru has a cabinet or ministerial form of government,—as in France. The Minister of Justice, Instruction and Religion, who is one of the six Ministers of State, has charge of public instruction. Under the minister is a director-general of public instruction—a position which was created last January.² The Director-General therefore has all the administrative work of public instruction in his hands. Under him are the following chiefs at the head of their respective bureaus. These include the chief of secondary and higher education; of the personnel and general administration, an important post under the present organization; of equipment and supplies; of statistics; and archives. Aside from these bureaus under

²Previously there was a Director-General of Justice, Public Instruction and Religion, but by decree that of Public Instruction has been established separately. Legally the work of secondary and higher education was left in the hands of this Director, and primary education in the hands of another Director.

the director-general, the minister has an expert adviser in matters appertaining to educational administration. Concerning the present organization it would seem highly desirable to make the work of all of these officials free from political influence, except that of the minister. There is also a Superior Council of Education, but it has had a rather checkered career. It has been suggested that there be a separate minister for education, but there are two sides to this question.³

The constitution of Peru guarantees the existence and diffusion of primary instruction, which shall be free and obligatory.⁴ The present law of public instruction, primary, second and higher instruction, was passed by Congress in 1901; the portion dealing with primary instruction was remodeled in December, 1905. Upon these two laws are based numerous executive decrees, amplifying the system of public instruction.

Primary Instruction

Elementary education is obligatory for boys between the ages of six and fourteen, and for girls between the ages of six and twelve. Primary schools are of two classes: (1) elementary; (2) "centros

³It will be noted that Peru has been securing (for some years) from time to time from Germany, Belgium, Switzerland, and other European countries, teachers for the national colegios. The duties of these teachers have been confined entirely to teaching in these schools, or in a few instances to directing them. It was only a year ago that it was realized there was need of well-trained and experienced men in the administrative branch of education. Dr. Manuel V. Villaran, who had made a thorough study of the educational situation (*Revista Universitaria*, Año III, Vol. II, No. 23, pp. 1-21, and No. 24, pp. 105-130, Sept. and Oct., 1908), upon being called to the Cabinet with the portfolio of Justice, Instruction, and Religion, decided to engage from the States, a director general and four departmental instructors of primary instruction, and a director and number of special teachers for the national colegios and for normal instruction.

Dr. Villaran's plans were only partially carried out when a change of Cabinet brought to the department of instruction a new Minister, who did not find himself entirely in sympathy with the plans of his predecessor. Before this time, however, four of these men were on their way to Peru. They were men especially prepared, by practical experience as well as by large academic and professional training, for the work they were to do. They are now rendering important service of an administrative character, the full value of which will receive recognition only in time. Dr. H. E. Bard, who is adviser to the Minister of Instruction, had for some years before coming to Peru given special attention to the administrative sciences, and particularly to the science of educational administration. He had had valuable practical experience also in this field in the Philippine Islands. Some far-reaching reforms have already been effected through his initiative. It is expected that the work of these men will demonstrate the need of others like them, and in this way will one of Peru's greatest educational needs be met.

⁴Article 24. See Constitution of Latin-American Republics published by the International Union of American Republics.

escolares," or literary school centers. Kindergarten schools are also provided in two or three instances. The elementary schools take up the studies of the first two years' work of primary education. From the following curriculum it will be seen that in these two years reading, writing, arithmetic, the metric system, notions of geography and history of Peru, the Christian doctrine and physical exercises are provided. The executive decree of June 20, 1906, makes a conscious effort to provide primary education in a comprehensive way, but in practice the results have not been perfectly satisfactory. The curriculum for the five years of primary instruction follows:

<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>	<i>Fourth Year</i>	<i>Fifth Year</i>
1. Reading and writing	Reading and writing	Reading and writing	Reading and writing	Reading and writing
2. Arithmetic	Arithmetic	Composition and grammar	Composition, grammar	Composition and grammar
3. Object lesson (plants, human body, colors, seasons, with drawings of objects where possible)	Notions of geography with special reference to Peru	Arithmetic	Arithmetic, including metric system	Arithmetic
4. Christian doctrine	History of Peru	Geography, with special reference to Peru	Geography of Peru and the rest of America	Geography of eastern hemisphere
5. Games and singing	Object lessons (as in first year)	History of Peru	History of Peru	History of Peru
6.	Principal duties of man (labor, saving, electoral obligations, military service, truth, cleanliness, etc.)	Notions of Physics	Physics	Physics
7.	Games and singing	Notions of chemistry	Chemistry	Chemistry
8.		Natural history	Natural history	Natural history
9.		Notions of agriculture	Notions of agriculture	Notions of agriculture
10.		Notions of arboriculture	Notions of arboriculture and horticulture	Notions of arboriculture
11.		Manual labor, geometry and drawing	Manual training, geometry and drawing	Manual training, geometry and drawing
12.		Music	Music	Carpentry (in boys' schools)
13.		Christian doctrine	Ethics	Music
14.		Physical training and notions of hygiene	Physical training	Ethics
			Notions of hygiene	Physical training and hygiene

Selecting at random one or two of the subjects provided for, we may get an idea of the breadth of the course of studies, which is not however carried out in practice under present conditions. In the fourth year, the course in chemistry presumably includes a study of the air, combustion, hydrogen and oxygen, water, chlorine, sulphur, phosphorus, carbon, notions of chemical nomenclature, acids, bases, salts. The fifth-year course in arithmetic includes mental operations, the decimal system, prime numbers, maximum and minimum divisor, proportion, metric system, weights, measures and money systems, bookkeeping, commercial documents.

Executive decrees provide for the division of the country into sixty school districts, for the purpose of primary education, although previously there were over one hundred school districts. In each of these districts is an inspector who sees that the school regulations of the central government are carried into effect. There is an exception in the case of Lima and Callao, where two inspectors are provided, one for boys' schools, the other for girls' and mixed schools.⁵

In the past the inspectors have not always proved efficient, visiting the schools infrequently, and knowing or caring little about the requirements of their position. Consequently, there has been a recent decree providing qualifications which may result in a better system of inspection. The new decree, however, has one serious defect in that it requires the inspector to telegraph the fact of his intended visit to the director-general in Lima and to the sub-prefect of the province which he expects to visit. By this means the school authorities may secure advance notice, and be prepared. An inspector will now be required to have (1) a degree (bachelor, or diplomas from the normal school), (2) the inspectors now in office must take an examination within ninety days to prove their competence, otherwise new inspectors are to be appointed.⁶ Furthermore, the Minister of Public Instruction has another check on the work of the schools in the special inspectors (*visitadores*) who may be

⁵The latest decree is dated January 22, 1910.

⁶Executive decree of January 22, 1910. The previous decree provided for departmental, provincial and district inspectors. The present plan, therefore, according to the claims of its advocates, effects an economy in the number of inspectors, increases their efficiency, reduces the amount of official routine, and saves money.

appointed from time to time by the minister in order to make special investigations.

In general, at least one elementary school, giving the work of the first two years of primary instruction, must be established for every two hundred inhabitants. The departmental capital must have at least two primary schools—one for boys, the other for girls; the provincial capital must have at least one primary school even if the population should not be large enough. Public schools are established by decree.

The last annual report of the Minister of Instruction shows that the number of schools in actual operation, school year 1907, was 2,262, or about one hundred less than there should have been. Of these over ninety per cent gave instruction for the first two years of primary education only—840 were for boys, 677 were for girls, and 745 were mixed schools for boys and girls. Instruction was given to 161,660 pupils during the year, two-thirds of whom were boys, and only 5,450 of these received instruction in the upper classes of the primary school. The average daily attendance was about sixty per cent. With the pupils in private schools, less than one-fifth of a million of children were receiving primary education throughout the Republic.⁷ This appears to be a small proportion for a population estimated at more than 3,500,000 inhabitants.⁸

The following table will furnish the details:—

	Receive instruction	Do not receive instruction	Could read	Could not read	Could write	Could not write
Boys . . .	65,536	164,794	73,778	156,609	50,615	179,726
Girls ..	34,478	151,736	41,273	144,884	28,285	157,918
Total	100,814	316,530	115,051	301,493	78,900	337,644

A census of school children within the age limits⁹ for the purpose of primary education was made in 1902.¹⁰

According to racial distribution there were 67,928 white children, 198,674 indigenous or native children, 144,298 mestizos and

⁷Annual Report of the Minister of Instruction for 1908, Vol. II, pp. 333-337.

⁸The last general census was taken in 1876, but doubts have been entertained about its accuracy. At that time there were 2,700,000 inhabitants. Partial censuses, etc., led to the estimate given above. The coastal region has about one-fourth of this total, the Andean region about five-eighths, and the eastern region the rest.—A. Garland, Peru in 1906 (2d edition), pp. 100-101.

⁹Including 75,000 from the ages of 4 to 6, i. e., children who could attend a kindergarten school.

¹⁰Censo Escolar de la Republica Peruana correspondiente al año 1902.

5,644 blacks. Unfortunately it is impossible to make comparison of this data by the three physiographic divisions, since it is given only for the twenty-one departments of the Republic. For the department of Lima, which includes the capital and a few small towns and plantations, there were 11,038 whites, 26,664 indigenous or native, 12,468 mestizos, and 2,432 blacks. In a way, therefore, Peru has its racial problem to settle, from the educational point of view, just as we have in the United States. It would seem plausible that the introduction of American teachers and American methods, from sections where the education of mixed races is prominent, should be carefully considered by the government of Peru.¹¹

The teachers in the primary schools are women in the majority of cases. Although supposed to have a diploma, the majority of teachers are not so provided.¹² Thus, out of 2,944 teachers, 1,225 men, 1,719 women, two-thirds did not possess a diploma.

At present there are three normal schools—one for men and two for women. Two are located in Lima, and a comparatively smaller one for women in Arequipa. Previously there were more, but financial and other difficulties have caused the closing of the others. The act of Congress (March, 1901) provided at least three normal schools for men, and three for women. In the normal school for men the curriculum provides three years of study, which differs somewhat from that provided for the women's normal school. In the normal school for women in Lima the course of studies is as follows: First year: Spanish grammar and literature, penmanship arithmetic, geography, history, religion, object lessons, domestic economy and hygiene, manual training, French or English, vocal music, physical exercises, attendance upon model classes in the School of Practice. Second year: general notions and anthropology and infant psychology, pedagogy, history, general hygiene, domestic economy, religion, elocution and composition, manual training, French or English, music, physical exercises, attendance upon model classes in the School of Practice. Third year: Methodology, notions of the history of education, school hygiene, domestic economy, civic education and school legislation, manual training, French or English,

¹¹q. v. *La Educación Nacional* (órgano de la Dirección de Primera Enseñanza), May, 1904, pp. 199, 205. Last year the government of Peru sent for some American teachers and superintendents of schools. This policy should doubtless be carried out on a larger scale to attain the best results.

¹²Report of the Minister of Instruction (1908), Vol. II, p. 334.

music, physical exercises, daily teaching in the School of Practice, pedagogical conferences. The courses at the normal school for women in Arequipa are most limited.

The government pays all expenses of most of the pupils in the normal schools in Lima, and in exchange requires them to teach in the primary schools of the respective departments from which the students come for a certain number of years. They are guaranteed a minimum salary per month for this work.¹³ During the school year 1907 the men's normal school had fifty-three students, the women's normal school in Lima forty-four and in Arequipa, sixty-three.¹⁴ A total of about \$100,000 was expended during 1906 for salaries, equipment and other expenses, and twenty-five students were graduated. These figures fairly represent the work of preceding years.

Revenue and Expenditure for Primary Education

The Minister of Instruction has the portfolios of Justice and Religion in addition to that of Education. Consequently, the congressional appropriations for the Department of Education form only a part of the revenues and expenditures which he controls. Nevertheless, to insure at least a certain amount of revenue which would not depend entirely upon the action of Congress, a law was passed providing special sources of income. All told, the revenues for primary instruction are derived from the following sources: (a) A special tax, or *mojonazgo*, on alcoholic drinks and mineral water, insofar as money from this source does not furnish more than fifty per cent of the total revenue of any municipality; (b) local taxes created by special acts of Congress; (c) special funds and revenues from property; (d) thirty per cent of the departmental revenues, deducting from this the subventions assigned to secondary instruction, on the basis of the departmental appropriation of 1905; (e) five per cent of the national revenues; (f) fines imposed for infractions of the law and decrees relating to primary instruction. In 1906 these revenues amounted to \$1,150,775; in 1907 they were slightly higher; in 1908 they amounted to \$1,309,090. Owing to the economic crisis, the sum voted by Congress for 1910 has been reduced

¹³Decrees of April 4, 1907, and January, 1910.

¹⁴Report of the Minister of Instruction (1908), Vol. II, p. 338.

considerably, so that less than a million dollars were available this year.

Some Defects in the System of Primary Education

As late as 1860, Dr. Francisco Calderon, in his excellent *Diccionario de la Legislacion Peruana*, stated that the country still felt the lamentable consequences of the repressive system of education which had been provided by the Spanish government during the colonial period.¹⁵ Although most of these consequences have disappeared to-day, some still remain. A temporary decree bearing on public instruction had been promulgated in 1855—the first general decree up to that time. It remained in force until 1876, although attempts had been made in the meanwhile to change it. By the latter decree, issued March 19, the system of public instruction was decentralized, especially as regards primary instruction. The departmental authorities were intrusted with secondary, the municipal councils with primary education, i. e., so far as the financial powers were concerned. The directive body was a Superior Council of Public Instruction. It soon became evident that the local authorities did not, or would not, provide suitable funds, and matters went from bad to worse. Under these circumstances Congress enacted a law in 1901 centralizing the administration to a large extent—a work which has been carried out more thoroughly by the act of 1905, for the central government was given full control of public instruction.¹⁶

The majority of the reports of the Ministers of Instruction throughout this period, aside from the question of administrative centralization, emphasize the importance of primary education. Yet almost invariably these same reports state that primary education was in a condition far from satisfactory. The complaints usually take the form of lack of money, lack of schools and equipment, dearth of suitable teachers, and the need of better salaries, and more punctual payment of teachers. Thus, in his report for 1893, the Minister of Instruction pleads for a broader basis of primary education in accordance with the Constitution, and complains of the comparatively large sum spent for secondary and higher

¹⁵Vol. II, p. 324.

¹⁶Exposición sobre el Estado de la Instrucción Pública en el Perú enviado al Congreso Pan-Americano de Chile, pp. 4-6.

education, when the majority of the children of the country did not even know how to read or write; when many of the provinces did not have teachers, nor school buildings, nor any income for the most indispensable equipment. He blamed these conditions largely upon the decentralized system of administration.¹⁷ Unfortunately, the defects which existed under the decentralized system of administration have by no means disappeared. With several exceptions, they are just as glaring as before. The main defects lie in the administration itself, and the lack of sufficient funds to carry out a progressive program of reforms. The administrative machinery needs remodeling, but should undoubtedly remain centralized. The financial problem is considered very serious at present, but even here there is room for improvement in the expenditure of the money voted by Congress for schools. The State could really spend profitably five times the sum voted for this year. It would then be in a much better position to carry out the provision of the Constitution providing obligatory primary education.

This applies with added force to the education of girls by public authority. As one prominent Peruvian writer puts it: "So long as the intellectual and social level of the family is not raised, by the education of the mother, our people will forge ahead very slowly. That task, the realization of which is of national importance, belongs to man, who should make it a reality. Women cannot at one and the same time attempt the problem, propose the remedy, and bring to pass the miracle. The task belongs to man. The surest way is to multiply the centers of instruction and provide for the better education of woman."¹⁸

Secondary Education: Administration and Curriculum

Secondary education is under the direction of the Minister of Instruction. Outside of Lima the prefect of the department acts for the Minister. The act of 1901 forms the ground work upon which is based the present decree relating to secondary education. Until this school year (March 1, 1910, to February 28, 1911), the

¹⁷Page xxv. Cf. also report for 1891, page xli; 1892, pp. 23, 26, 30; 1894, p. xxxv, etc.

¹⁸Elvira Gareía y García. *Tendencias de la Educación Feminina*, p. 37. This report was presented to the Pan-American Congress of 1908. Cf. also article by L. S. Rowe in report of U. S. Commissioner of Education, 1909, pp. 326, 327.

decree of March, 1904, was in force. It regulated the curriculum and gave in general outlines the subject matter to be taught in each course. Beginning with this year the following curriculum has been introduced by the decree of January 29, 1910:

<i>First Year</i>	<i>Hrs.</i>	<i>Second Year</i>	<i>Hrs.</i>	<i>Third Year</i>	<i>Hrs.</i>	<i>Fourth Year</i>	<i>Hrs.</i>
Spanish	4	Spanish	4	Spanish	3	Spanish literature..	3
Modern languages .	3	Modern languages .	3	Modern languages .	3	Modern languages ..	2
History	3	General history ..	3	General history ..	2	General history ...	3
General geography		Geography of Europe		Geography of Amer-		History of Peru ...	2
and geography of		and Africa	2	ica and Oceanica. .	2		
Asia	2						
Arithmetic	5	Arithmetic	1	Algebra	2	Philosophy	5
Zoology	3	Algebra	2	Geometry	2	Civics	1
Religion	1	Geometry	2	Geology and mineral-		Trigonometry	1
				ogy	2		
Penmanship	1	Botany	3	Physics	3	Physiology and anat-	
						omy	1
Drawing	2	Religion	1	Chemistry	3	Physics	3
Music	1	Penmanship	1	Drawing	2	Chemistry	2
Physical exercise ..	2	Drawing	2	Music	1	Drawing	2
		Music	1	Physical exercise ..	2	Physical exercise ..	2
		Physical exercise ..	2				
Total hours.....	27		27		27		27

The principal changes over the previous curriculum, and some of them are undesirable changes, include fewer hours devoted to the study of modern languages, and more hours to philosophy, which was added to the studies of the fourth year, physical exercise, and the exact sciences. Prior to 1904, secondary education was given in a six-year course. The change to four years was based in large part upon the French reforms of 1902.¹⁹ Although the decrees have provided the full course of studies in secondary education, it has not always followed that each year's work has been given in full in each colegio.

Last year the government had also approved a plan of commercial education for Guadalupe Colegio, which I had the honor to formulate. It gives the student a chance to get secondary education which will put him more in harmony with his economic environment. There is great need for such education owing to the unusually large proportion of those who enter upon professional careers—law, medicine, engineering. Commercial education must occupy an exceedingly important position in the educational problem of all Latin-American countries during the next two decades. Commercial sections have already been established in several other colegios since

¹⁹Exposición sobre el estado de la Instrucción Pública en el Perú, p. 19.

then. The plan of studies for the commercial department at Guadalupe Colegio includes the following:²⁰

First Year	Hrs.	Second Year	Hrs.	Third Year	Hrs.	Fourth Year	Hrs.
Spanish and commercial correspondence	4	Spanish and commercial correspondence	4	Spanish literature ..	3	Spanish literature ..	2
English	5	English	4	English	3	English	3
Outlines of general history ..	4	French (or German or Quechua) ..	2	French (or other languages) continued,	3	Other languages (continued)	3
Arithmetic	5	Commercial arithmetic and algebra ..	4	History of Peru and neighboring countries	3	History of commerce and modern industrial history ..	3
Geography (physical and general)	4	Bookkeeping	3	Geometry	3	Commercial arithmetic	2
Natural history	4	Commercial products with chemical experiments	3	Bookkeeping	3	Chemistry	5
Penmanship	1	Penmanship	1	Com'l geography ..	4	Civil government and notions of commercial law ..	3
Physical exercise ..	2	Shorthand and type-writing	7	Physics	3	Political economy ...	3
		Physical exercise ..	1	Shorthand and type-writing	4	Shorthand and type-writing	3
Total hours	29		29		29		27

The present law on secondary education (1901) provides two types of schools—the *colegio* and the *liceo*. The work of the former can be determined by referring to the curriculum already given. The colegio was intended to be a stepping-stone to higher education. The liceo was intended to provide instruction adapted to agriculture, commercial education and mining and mechanical arts, "in order that pupils might acquire the knowledge indispensable for dedicating themselves to industries dependent on those branches of instruction." Colegios were to be established in places where universities were located, and in departmental capitals at the discretion of the Superior Council of Public Instruction. Liceos, according to the law, were to be established in provincial capitals (101 provinces in Peru) by the same Council. As yet liceos have not been established, nor is there any likelihood of such action taking place. The course of studies was to be formulated by the Council as the basis for an executive decree, and instruction in the colegio or the liceo was to last six years. No plan of studies could be modified during a period of five years. Yet by decree of 1904, the course of studies was cut down to four years in the colegio, the only institutions of secondary instruction in existence, and the amount of work per year increased. Whatever advantages may have been produced by cutting down the course to four years, this action illustrates one of the defects from which the educational work suffers. I refer to the

²⁰Decree of January 29, 1910.

plethora of decrees introduced by rapidly changing ministers. Some of the decrees, moreover, are evidently a violation of the spirit, if not the letter, of the laws of Congress.

The Director and the Professors

In each colegio and liceo the law of 1901 made provision for a director, a sub-director, a secretary, the professors, inspectors, and the office personnel. The director is supposed to have received a university degree, but this provision is not always enforced. He is expected to reside in the colegio. He is responsible for the carrying out of laws and other regulations; for the discipline of the school; for the work of the employees; for the proper accounting of the revenues of the school; for the calling of faculty meetings; and for the annual report showing certain details with reference to matriculation and examination of students, equipment, etc. The sub-director has to do more directly with discipline, and aids the director. He is also expected to live in the school building if there are any students boarding at the institution.

The professors are classed as full professors and assistant (*adjunto*) professors. The former may hold their position for ten years as a result of a competitive examination—a position which may be made permanent if the professor has written a meritorious scientific work within this limit. The Superior Council of Public Instruction decides on the merits of the case. Less than a dozen positions of this type exist to-day, in a total teaching staff for all national colegios of more than 400. The appointment of professors is by the Director, or by the government directly—depending on the subjects to be taught. Salaries are by no means uniform in the colegio. Moreover, many professors simply teach part of the time in a national colegio and devote the rest of their time in private colegios or engage in other work. Complaints have been made on this score, as well as regards the salary, which may be said to average about five dollars per month for one hour of instruction per week. The *adjunto* professors simply replace the regular professors in case of absence of the latter.

Quite a number of foreign teachers, chiefly German, Belgium and Swiss, have been teaching in the national colegios during the last three or four decades. It must be added, however, that they are

by no means looked upon with favor by the native teachers. The professor is aided by inspectors in maintaining discipline in the class-room. This system of discipline has its counterpart in few educational codes of other countries; it certainly does not offer any real advantages.

Students in Secondary Institutions

The school age of pupils attending the colegios is presumably from thirteen to seventeen. The former decree required the pupils to have completed the twelfth year, but in practice this has not always been insisted upon. The new decree requires pupils of the first year to be between the ages of twelve and fifteen. Admission to the colegio may be by examination, or upon satisfactory completion of primary instruction. The latter method prevails almost entirely.

There were twenty-eight national colegios in Peru in 1908 with a total of 3,289 pupils. The largest and most important by far is Guadalupe Colegio, in Lima, with over five hundred pupils. In fact this colegio serves as the model for the others, and has a building costing all told about half a million dollars. In 1904 there were twenty-three colegios with a total of 2,041 pupils. Only three of the national colegios are for girls, with a total of about 200 pupils. These three colegios are located in Cuzco, Ayacucho and Trujillo. Supplementing the national colegios are the private colegios, located chiefly in Cuzco and Lima, and directed by the church, or as business ventures. These private colegios numbered thirty-four in 1908, of which twenty were for boys, and fourteen for girls. The number of boys who attended totaled 1,016, of girls, 275.

The law provides that pupils may board in the colegio. The maximum number of such pupils is determined by the Superior Council of Public Instruction, according to the law, but not in practice. Many pupils, both in national and private colegios, take advantage of this provision of the law.

The expense of a pupil in Guadalupe Colegio may be taken as representative. The charges here include the following: Matriculation fee, \$1; for annual examinations, \$2; tuition, \$20 per year, for pupils in the primary grades which happen to be given in this colegio, and for the first two years of secondary instruction, and \$30 for the

last two years of secondary instruction; board and lodging for the year, \$105; fees for the use of equipment, \$3; although third- and fourth-year students pay \$2.50 additional for the use of the laboratories. Laundry charges, for those who care to avail themselves of the opportunity amount to \$1.50 per month. In 1909 Guadalupe Colegio provided board and lodging for 175 pupils, and in addition board for over 200 additional pupils. This year the number was almost doubled, owing to extensions and improvement to the building still under way.

Practically each department gives scholarships to a limited number of pupils, many of whom are sent to Guadalupe Colegio. Such a scholarship provides all tuition and living expenses.

The students are not accustomed, as a general rule, to do much, if any, school work at home. School hours are from 8 to 11 in the morning, and 1 to 5 in the afternoon, six days per week. As the curriculum provides less than thirty hours of class-room work, the other hours are utilized for study, physical training and military drill. Irregularity of attendance on the part of pupils, and even of professors, is one of the marked defects of administration which merits rigorous corrective measures.

Examinations and Prizes

Mention must be made of the system of prizes existing in all branches of education—public as well as private. Medals, books and other useful objects are distributed for the meritorious at the close of the school year. The annual exercises correspond to our high school commencement, only here the exercises come at the close of the year. The prefect of the department, or in Lima, the Minister of Instruction, and perhaps even the President, and other school authorities, attend the exercises at the national colegio.

The system of examinations is worthy of special attention. At the close of each of the four years there is an examination in each subject in the official program of studies. The term work counts one-third of the general average. The written examination, usually lasting less than one hour, counts, one-third; and the oral examination, usually five to ten minutes for each pupil, the other third. For national colegios, special examining boards of three members each are appointed by the Director. The professor of the class

acts as president of the board. For private colegios whose pupils desire to present themselves for the examination in accordance with the official program, three special examining boards are appointed by the government. For Lima, they are appointed by the Minister; for the departments by the prefects. These boards examine in letters, sciences, and languages respectively. It was my privilege to act as president of the last mentioned board for Lima during 1909. The examining boards for private colegios receive a fee for every student who is examined, regardless of whether he presents himself, or whether he passes the examination. For national colegios one copy of the marks is sent to the Minister of Instruction; for private colegios one is sent to the Minister, one is left in the colegio itself, and the third is sent to the national colegio of the department in which the private colegio is located. The examining boards for private colegios are also required to prepare a report for the Minister relative to the pedagogical conditions existing in each colegio which has been visited. This board can only examine in the colegios which have previously sent to the Minister a request for such examination, including in this request the list of students who are to be examined. Practically all private colegios do this. A method of examination somewhat similar prevails in the universities. The system is not only cumbersome and time-consuming but in the public schools at least it is subject to log-rolling methods. Moreover, the actual examinations—oral and written—need modification. Even more serious defects might be noted as regards the examinations for private colegios. A competent national examining board, or perhaps even several departmental boards, should provide uniform examinations based on the official curriculum.

Income and Expenditures

The income of national colegios consists (1) of the sum voted by Congress; (2) any sum voted by the department; (3) special income assigned to a colegio; (4) fees of students; (5) rent from property owned by the school—usually insignificant. The budget of each colegio is made up toward the close of the school year by an Economic Council. This council consists of the Director, the treasurer, a professor of the colegio and two fathers whose sons are attending the school. The council meets several times during the

year to consider financial matters of the colegio, and towards this end it is generally convened by the Director.

For the twenty-eight colegios in 1908, the total income amounted to \$310,000, about twenty-five per cent of which came from tuition fees. It was spent in large part for salaries. A smaller sum was spent for maintenance of the school buildings, equipment, and supplies. On the whole there should be more money appropriated for secondary education, although it should at the same time constitute a smaller proportion of the total spent on public instruction than is the case at present. The objects towards which this increase could be devoted advantageously include: (1) adequate buildings and equipment; (2) pay of professors; (3) extension of commercial education in various national colegios.

There is need for greater elasticity in the courses open to students in the colegio. The law of 1901, in providing the liceos, sought to attain this end. The financial condition of the country, however, does not justify separate schools. Separate departments within the colegio should be provided along the lines of the organization in our high schools.

The establishment of a commercial department in the leading colegio of the country is a step in the right direction. After the adoption of a well-considered plan providing separate departments for the colegio, the government should make an earnest effort to encourage a larger proportion of the students to attend the national colegios than is the case at present. As it is, the national colegio is superior to the private colegio from almost every point of view and yet for one reason or another about forty per cent of the total number of students are attending private colegios. It is a fact of some significance that there is no national colegio for girls in Lima, and that there are only three in the country.

Higher Education

The universities of Peru include the University of St. Mark in Lima, founded 1571 by Pius X and royal decree of Philip II, and the "minor" universities of Cuzco, Arequipa and Trujillo. These were established in 1692, 1835 and 1824 respectively. The university of Cuzco was closed temporarily last year owing to certain irregularities. The occasion gave rise to a sharp discussion at the

recent regular session of Congress, and the executive was given power to provide for the reorganization of the university. It will probably be a matter of two or three years when Congress will revise the law affecting higher education.

The University of St. Mark has six faculties—theology, jurisprudence, medicine, natural and mathematical sciences, letters, and political and administrative sciences. The University of Cuzco has faculties of jurisprudence, letters, political and administrative sciences, and a “section” or partial faculty of natural science. The other two have these same faculties with the exception of the last mentioned.

University instruction is controlled by the state, but there is more autonomy in higher education than in secondary or primary instruction. The administration of each university is under the immediate jurisdiction of a University Council. Its duties are similar in nature to those of the board of trustees in our large private universities. For Lima, it consists of the rector, the vice-rector, the secretary, the deans of the various faculties and another delegate from each faculty. The delegates are elected by the professors of the respective faculties. In the other universities the Council includes all of the professors. The Council administers the property of the university, approves the annual budget, authorizes special expenditure, provides for auditing of accounts, acts upon the proposals of the rector for the better administration of the institution; formulates the by-laws, creates or changes courses and professorships, proposes to the Superior Council of Public Instruction changes deemed essential in granting university degrees—bachelor or doctor.

The rector of the university must have a doctor's degree, and although appointed as a rule for four years, may succeed himself. He and the vice-rector are normally elected by the University Council, except the University of St. Mark, where only the deans of the faculties make the selection. The rector is responsible for the administration and progress of the university, and acts as the intermediary in communication with the Minister of Education. Each faculty elects its own dean and sub-dean, formulates its budget which it submits later to the University Council, examines candidates for degrees, approves the outline of studies for each course, authorizes payment by the dean of sums exceeding \$50, and makes suggestions with reference to the curriculum. There are two grades of

professors, viz., principal or active professors, and adjunct professors who replace the former in case of leave of absence. The latter receive a salary only during the time that they teach. The active professors are of two classes, and include those who are named ad interim and those who secure the position through competitive examination. They must have the doctor's degree. As a rule they have less than ten hours of actual teaching per week; moreover, they are almost invariably engaged in other lines of activity outside of university circles. The courses within a given faculty are usually arranged in groups, and the professor must teach all the subjects within a given group. No professor is permitted to give courses in more than two of these groups. At the University of Arequipa, for example, one group includes courses on diplomacy, private international law, and history of the treaties of Peru. The law of 1901 provides the courses which are to be given; the arrangement in groups is left to administrative authority.

Students can matriculate in the University upon graduating from the colegio.

To secure a degree in the faculty of theology requires six years of study; in jurisprudence, five years; medicine, seven years; sciences, letters, or political and administrative sciences, three years. These are required for both degrees, viz., bachelor and doctor. A student is permitted to register in several faculties, under certain restrictions. In order to matriculate in the faculties of jurisprudence and political sciences a student must have completed two years in the faculty of letters. For example, he may matriculate in the faculty of political and administrative sciences, as a regular student, and also in the faculty of letters to pursue special or regular advanced courses.²¹

With the exception of the University of St. Mark, the universities have little property of their own from which they may secure revenue. Hence most of their income comes from the state subventions. In 1908 the income for all four universities amounted only to a third of a million dollars. Of this total, matriculation fees furnished sixteen per cent of the total income of the University of St. Mark; fifteen per cent in the University of Arequipa; twenty-five per cent in the University of Cuzco; and thirty per cent in the Uni-

²¹Annual Report, Minister of Education, 1908.

versity of Trujillo. In other words, about one-fifth of the total income comes from tuition fees.

Besides the four universities, there are three other national institutions of superior instruction, viz., the Engineering School, the Agricultural College, and the School of Industrial Arts—all located in Lima. The first of these institutions has the following departments: (*a*) preparatory section requiring two years, with emphasis on natural and mathematical sciences; (*b*) department of civil engineering, 3 years; (*c*) of mining engineering, 3 years; (*d*) of mechanical engineering, 3 years; (*e*) of electrical engineering, 1 year.

The Agricultural and Veterinary College also has a preparatory section of one year, with special emphasis on natural sciences. The regular work of the Agricultural College requires three more years of study. In addition to these studies, there is a special Grange School giving a two-years' course along specialized lines.

The School of Industrial Arts, as in the case of the former two institutions, also has a preparatory section, with the view to reviewing the work of the primary education. Hence, in reality, this school cannot properly be classed as an institution of superior education. After the preparatory work, specialized work is given along lines of manual training and industrial arts.

Space will not permit a review of the various problems which need attention in a revision of the educational system of the country. Some of the defects have been mentioned in the article, but what is especially needed is a change in the administrative machinery under a new law of Congress which shall re-organize the work of public instruction on a permanent basis. The country is ready for this change, and a special commission established by supreme decree last April will present a project to Congress. It is certain that it will contain radical changes, but it is not so certain that Congress will accept these.